Electro-Plating Services / I-696 Incident

Frequently Asked Questions (FAQ)

INTRODUCTION

These frequently asked questions have been compiled to answer the community's concerns about the green liquid that seeped onto the shoulder of the I-696 freeway on December 20, 2019.

What happened?

A bright green liquid seeped onto the shoulder of the I-696 freeway east of the Couzens offramp in Madison Heights on Dec. 20. This prompted an immediate response from state, federal and local agencies including: the U.S. Environmental Protection Agency (EPA); Michigan Department of Environment, Great Lakes, and Energy (EGLE); Michigan Department of Transportation (MDOT); Michigan Department of Health and Human Services (MDHHS); Michigan State Police (MSP); Oakland County Emergency Management; Macomb County and the city of Madison Heights.

What was the green liquid?

The green liquid was groundwater contaminated by industrial waste. Preliminary testing showed that the contaminants include hexavalent chromium, cyanide, trichloroethylene and other metals.

Where did it come from?

The investigation has determined that the green liquid came from Electro-Plating Services (EPS), located at 945 E. 10 Mile, Madison Heights. The facility was shut down by state regulators in 2016 after a history of repeated violations of environmental laws.

How did it get to the highway?

The contaminated groundwater appears to have seeped from under the Electro Plating Services building, under the I-696 service drive, and through the embankment on eastbound I-696. It's probable that a seam of sand, or a utility conduit pipe embedded in the clay soils, created a path for the contaminated groundwater to flow toward the highway embankment.

How did the groundwater get contaminated?

Electro Plating Services has operated at this location for decades and has a history of mismanaging industrial waste. An earthen pit in the basement appears to be a significant source of the contamination. The building has a shallow basement underneath the former plating operations. The building owner dug a pit in the basement floor, approximately 10 feet by 10 feet across and 5 feet deep. The pit, which was dug into the clay soils beneath the basement, collected industrial waste, rainwater from the leaking roof, and groundwater that seeped in from under the building. When the business was operating, the owner pumped the water from the pit into a treatment system and then into the sanitary sewer. Over time, the clay walls and floor of the pit became contaminated with the

chemicals used in the plating operation. As groundwater seeps in and out of the pit, it carries the contamination away from the building.

Will this affect Madison Heights drinking water?

No, because all nearby residents and businesses are on municipal water from the Great Lakes Water Authority. The groundwater in this area is not used for drinking, cooking or bathing.

Will this affect our rivers and lakes? And what about the drinking water intakes in Lake St. Clair?

The storm sewers around EPS and on I-696 carry stormwater into Bear Creek, the Red Run Drain, the Clinton River and Lake St. Clair. Any pollution that enters this system ends up in our lakes and rivers. We don't know how much contamination may have entered the storm sewer before the leakage from the EPS site was discovered. Samples were collected from the storm sewer catch basin near the leaking contaminants. Based on the concentrations of chemicals found near the source and considering the large volume of water that enters this system, contaminants would be below detectable levels once the storm sewers flow into local waterways. Nonetheless, this release of pollution is a concern for the environment and requires a permanent remedy.

Will this affect air quality?

The air around the shoulder of the highway was monitored by first responders when the substance was first discovered Dec. 20, 2019. No air quality hazards were identified.

What about my garden?

Local gardens are generally fairly shallow and irrigated by city water or collected rainwater. The contaminated groundwater appears to be seeping from a pit underneath EPS that is approximately 5-10 feet below ground surface. There is no indication that the contamination would be seeping to the surface in the surrounding neighborhoods. Additional testing will be done to confirm this.

What about basement sumps?

Basement sumps collect and remove groundwater from around the foundation of a building. If the groundwater near the building is contaminated, it can enter the sump. At this time, it appears that the groundwater leaving the EPS site is flowing to the north and seeping out at the highway. Additional groundwater sampling will be done to determine the extent of the contamination around EPS. Residential homes with basements and sumps are over 350 feet to the south and are not expected to be affected since groundwater flow appears to be to the north.

What is being done now to address the problem?

MDOT cordoned off the area and closed down the lane of traffic adjacent to the impacted embankment. That lane was reopened on Jan. 12, but the shoulder, exit ramp at Couzens and service drive continue to be closed. The EPA has installed sumps both in the basement of the facility and in the highway embankment. Water pumped from those locations is reducing the pressure that pushes it toward the highway and helping contain the liquid. Contaminated water from both places is being captured and stored for proper disposal. Nearby catch basins are being vacuumed daily. EPA and EGLE are taking extra precautions to ensure that heavy rains, and freezing weather do not cause additional problems with contaminated runoff.

The EPA has collected dozens of soil borings as part of an initial site characterization to help determine the extent and levels of contamination. Those findings will help inform a more permanent solution to protect the environment and human health from the contaminants.

EPA also is starting work on an interceptor trench that will allow contaminated water to flow into the trench where it will be pumped into storage tanks. The portion of storm sewer that would be a receptor for the contaminated

water has been isolated, and unaffected stormwater pumped around the isolated section so it will not receive contaminants from the site.

Who is responsible for this mess? And who will pay?

EPS owner Gary Sayers is the responsible party, and liable for the cleanup costs. If he is unable or unwilling to pay, any cleanup costs will be borne by taxpayers through the regulatory agencies.

Will the owner face further enforcement?

For his past violations, which resulted in the 2016 shut down of EPS, Sayers was convicted of illegally storing hazardous waste, sentenced to one year in federal prison and ordered to repay EPA's clean-up costs. He is currently serving his prison sentence. The regulatory agencies will be evaluating whether additional enforcement action can be brought in response to these events, and Michigan Attorney General Dana Nessel has indicated her office will explore possible additional charges.

What is the history of the site?

EPS is a former electroplating shop that operated from 1967 to 2016. Operations included copper, tin, bronze, cadmium, nickel, chromium, gold, silver, zinc, and lead plating. The site has a history of repeated violations of environmental laws. EPS was issued a Cease and Desist order from EGLE (then the Department of Environmental Quality) in December 2016 due to extreme mismanagement of hazardous waste that posed an immediate and substantial threat to the community. Throughout 2017, the EPA conducted an emergency cleanup of the site, removing thousands of containers of hazardous chemicals and pumping contaminated liquid from an earthen pit in the basement of the facility. This clean up addressed the immediate hazards on the site but was not intended to address all environmental impacts. In November 2019, EPS owner Gary Sayers was convicted of operating an unlicensed hazardous waste storage facility, sentenced to one year in federal prison, and ordered to repay the EPA $1.5 million for cleanup costs.

What has happened since the 2017 emergency cleanup?

A preliminary analysis of the site was completed by EGLE earlier this year as part of the process to determine eligibility for EPA Superfund testing and cleanup. These preliminary assessments, while limited in scope, identified significant contamination at the site. However, it also concluded that there was no risk to drinking water and was a low risk for migration of contaminates off site. Based on that analysis, the site was not accepted for EPA Superfund actions and would be addressed by other cleanup authorities, including state environmental laws. This process takes time to execute as action plans and resources are put into place.

This current incident indicates that there may be a preferential flow path offsite that was previously unknown. EPA and EGLE are addressing the offsite migration to include evaluating the site for further state funded remediation upon completion the current work ongoing at the site. This will include a formal site re-assessment for possible inclusion in the federal Superfund program.

What other properties does Sayers own, and are they contaminated?

EGLE has looked at three additional properties owned by Sayers:

- A residential property in the Petoskey area appears to have no industrial or commercial activity associated with it.
- A property near Sanilac is strewn with old equipment and junk, along with empty barrels that appear to have contained chemicals in the past. EGLE has inspected the property and did not find any indication of disturbed soils, dead vegetation or other indications of chemical disposal. Soil samples and water samples from a stream on the site and near a barrel suspected to contain chemicals have been taken, and results are pending.

- A building at 5900 Commonwealth Street in Detroit was found on Jan. 10 to have several pits, some containing liquid similar in color to that discovered at the Madison Heights facility. EGLE secured the property and is testing the liquid in the pits to ensure appropriate disposal. EGLE also is investigating whether the contaminants may have migrated from the pits into the environment to help determine next steps.

Where can I find updated information on this issue?

EGLE will update their Electro-Plating Services / I-696 Incident webpage as new information is available.

Michigan's Environmental Justice Policy promotes the fair, non-discriminatory treatment and meaningful involvement of Michigan's residents regarding the development, implementation, and enforcement of environmental laws, regulations, and policies by this state. Fair, non-discriminatory treatment intends that no group of people, including racial, ethnic, or low-income populations, will bear a disproportionately greater burden resulting from environmental laws, regulations, policies, and decision-making.

Meaningful involvement of residents ensures an appropriate opportunity to participate in decisions about a proposed activity that will affect their environment and/or health.